

**DECLARATION OF PERFORMANCE (DoP)**
**No. FC-7968-5.6-2022**

1. Unique identification code of the product-type: **SB 7968-5.6**
2. Type, batch or serial number or any other element allowing identification of the construction product as required under Article 11(4):  
**FUCHS SB 7968 5.6 (for bolts) / FC SB 5-2 (for nuts)**  
**Non-preloaded structural bolting assemblies –**  
**DIN 7968 – Hexagon fit bolts with hexagon nut for steel structures**
3. Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by the manufacturer:  
**Structural metallic works.**
4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required under Article 11(5):  
**FUCHS (for bolts) / FC (for nuts)**  
**FUCHS Schraubenwerk GmbH, Bismarckstraße 24, D-57076 Siegen, Germany**  
**Tel. +49 271 4095 100 Fax: +49 271 4095 102 Email: info@fuchs-schrauben.de**
5. Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2):  
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6. System or systems of assessment and verification of constancy of performance of the construction product as set out in CPR, Annex V:  
**System 2+**
7. In case of the declaration of performance concerning a construction product covered by a harmonised standard:  
**Notified factory production control certification body No. 0769 performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control and issued the certificate of conformity of the factory production control No. 0769-CPR-VAS-00358-3.**
8. Declared performance

Essential characteristics	Performance	Harmonised technical specification
Tolerances on dimensions, form and position (bolts)	Product grade C (DIN 7968)	EN 15048-1:2007
Percent elongation after fracture (bolts)	$A \geq 20 \%$	
Minimum tensile strength (bolts)	$R_m \geq 500 \text{ MPa}$	
Lower yield strength or Stress at 0,2 % non-proportional elongation (bolts)	$R_{eL} \text{ or } R_{p0,2} \geq 300 \text{ MPa}$	
Stress under proof load (bolts)	$S_p \text{ of } 280 \text{ MPa}$	
Strength under wedge loading (bolts)	$R_m \geq 500 \text{ MPa}$	
Hardness (bolts)	$\geq 155 \text{ HV and } \leq 220 \text{ HV}$	
Impact strength (bolts)	$\geq 27 \text{ J at } -20 \text{ }^\circ\text{C}$	
Release of dangerous substances (bolts)	NPD	
Durability (bolts)	NPD	
Tolerances on dimensions, form and position (nuts)	Product grade A for M12 and M16 and B for M20 to M30 (ISO 4032)	
Stress under proof load (nuts)	$S_p \text{ of } 610 \text{ MPa for M12 and M16, } 630 \text{ MPa for M20 to M30}$	
Hardness (nuts)	$\geq 146 \text{ HV and } \leq 302 \text{ HV}$	
Release of dangerous substances (nuts)	NPD	
Durability (nuts)	NPD	
Tensile resistance of the assembly (assemblies)	EN 15048-1 and EN15048-2 $F_{bi,max} \geq F_{ub} = A_{s,nom} \times R_{m,min}$ Pass with $R_m \geq 500 \text{ MPa}$	
Durability (assemblies)	NPD	

9. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8.  
 This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.  
 Signed for and on behalf of the manufacturer by:

Name and function: Dr.-Ing. Volker Dünkel – Research and Development  
 Place and date of issue: Siegen, 15.08.2022

Signature:

